DOCUMENT RESUME

ED 222 129 HE 015 537

TITLE An Analysis of New Jersey Postsecondary Education Expenditures: The Current System (FY 76) and the Commission Recommendations.

INSTITUTION New Jersey State Commission on Financing Postsecondary Education, Trenton.

PUB DATE Feb 77

NOTE 89p.

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS Advisory Committees; Community Colleges; Comparative Analysis; Expenditures; Fees; *Financial Policy; Financial Support; Government School Relationship; *Higher Education; Private Colleges; Resource Allocation; School Taxes; *State Aid; State Colleges; *Student Financial Aid; Tuition

IDENTIFIERS *Blue Ribbon Commission; *New Jersey

ABSTRACT

The current system of financing postsecondary education in New Jersey and that proposed by the Booher Commission in its final report, "Financing in an Era of Uncertainty," are compared. The Booher Commission was a public, blue ribbon commission appointed by the New Jersey Board of Higher Education. Implementation of the recommendations of the Booher Commission would mandate changes in present state financing strategies and the reallocation of state resources. The report considers major components of the current and proposed system in relation to student financial assistance and institutional aid. The state's appropriation to higher education is examined in total and across major expenditure categories. Attention is also directed to: fund allocation to various sectors or postsecondary education; the effects on students as classified by institutional sector and family income; and the impact of the two plans on New Jersey's taxpayers. The comparisons concern expenditures in 1976 dollars, and current higher education expenditures are derived from the adjusted funding year 1976 appropriation. A basic thrust of the commission's recommendations is that a larger proportion of higher education funds would be distributed to students directly through programs of financial aid and a smaller percentage through direct subsidies to institutions. In comparing the two alternative systems of financing postsecondary education, attention is focused on the effect of state student aid financial programs on the tuition and fee charges faced by New Jersey. The effect of federal student aid programs on the cost of college attendance is addressed in an appendix. The commission used a cost simulation model to determine full tuitions at each sector. (SW)

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# AN ANALYSIS OF NEW JERSEY POSTSECONDARY EDUCATION EXPENDITURES:

## The Current System (FY 76) and the Commission Recommendations

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## COMMISSION ON FINANCING POSTSECONDARY EDUCATION
## STATE OF NEW JERSEY

A PUBLIC COMMISSION APPOINTED BY THE NEW JERSEY BOARD OF HIGHER EDUCATION

# AN ANALYSIS OF NEW JERSEY POSTSECONDARY EDUCATION EXPENDITURES:

## The Current System (FY 76) and the Commission Recommendations

A Study Conducted by the

State of New Jersey

Commission on Financing Postsecondary Education

February, 1977

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## Preface

Unfortunately the focus of debate upon the introduction of a new financing plan is typically on:

- the total cost of the plan to the various funding sources, and
- the impact the plan has on each organizational unit in terms of funds flow.

These questions are important but they are also biased by self-interest and may dilute discussion of the key issues and the basic foundation principles. In an effort to promote the type of constructive, issue-oriented debate that should follow the presentation of the final report of the Commission on Financing Postsecondary Education to the New Jersey Board of Higher Education this report was prepared to answer the two questions cited above. A set of assumptions are stated and the patterns of funds flow are depicted as accurately as the data permit.

The problem with this type of report is that the data may well be used only as evidence in the public debate. While the data presented tend to support the thrust of the recommendations made by the Commission, the strength of the Commission recommendations must be judged not only by these data but also by their responsiveness to the changing environment and the existent inequities and inefficiencies in the financing system.

Numbers can only say so much and depending on who is using them and the context of the discussion the same set of numbers can be used to justify contradictory conclusions. Furthermore this report necessitated both some undesirable aggregation because of data limitations and a degree of simplification because the full exploration of all alternatives, e.g. the four ways to equalize county college funding, would have resulted in a lengthy and unreadable document.

The analytical framework employed was designed to provide the reader with an overview of the reallocation of financial support for postsecondary education in New Jersey that would result from implementation of the Commission's recommendations. To the extent possible the relationship between resource shifts and the Commission's recommendations are delineated.

Hopefully this analysis, and similar examinations in the future, will prove to be useful tools in assessing the acceptability of the funds flow under the Commission recommendations or under any other financing approach that is employed.

Andrew H. Lupton

Executive Director

## Introduction and Purpose

The primary objective of this report is to provide a financial comparison between the current system of financing postsecondary education in New Jersey and that proposed by the Booher Commission in its final report. The Commission's final report, entitled "Financing in an Era of Uncertainty" set forth a series of recommendations which, if implemented, would mandate certain changes in present state financing strategies. The discussion of these recommended shifts focus on explaining current and proposed policies and the corresponding rationale for change. "An Analysis of New Jersey Postsecondary Education Expenditures" seeks to describe the major financial implications of the Commission plan in comparison to the current system.

The financial implications of the Commission proposal consists of identifying and quantifying the reallocation of state resources which would occur if current financing strategies were amended as outlined in the final report. Major components of the current and proposed systems analyzed in this paper are grouped into either of two expenditure categories--student financial assistance or institutional aid.

Public support of higher education is allocated primarily via two delivery mechanisms--direct subsidy to institutions and student financial aid. Direct support of higher education institutions includes all monies which are disbursed from public sources to colleges and universities, net of any income returned by the school to the state treasury. Student financial aid consists of any public funds distributed to higher education students for the expressed purpose of assisting them finance the cost of their education.

Financial resources generated by both systems are grouped by expenditure category and their relative impact is compared for the major constituents of postsecondary education in New Jersey--the state, postsecondary education institutions, students and taxpayers.

- The state's appropriation to higher education is examined in total and across major expenditure categories in the Budgetary Overview section of this report.
- Major expenditure category funds are allocated to various groups of institutions via the current and proposed financing systems and analyzed in the Sector Comparisons section.
- Student Comparisons examines the monetary effects of both alternative financing plans on various groups of individual students as classified by institutional sector and family income.
- The impact on New Jersey's taxpayers of the current and proposed system is reviewed in the final section of this report.

The analysis of each of the major topics listed above examines the effects of the student and institutional aid expenditure categories separately and together as a state postsecondary education aid total.

Total state aid to postsecondary education under the current and proposed systems consists of a set of specific programs. One might consider examining and comparing the components of each of the alternative financing strategies separately. This approach was not adopted because when two complex systems are examined in such a disaggregated form, it becomes most difficult to conduct legitimate comparisons. No single program or procedure from either system need necessarily be designed to provide similar target populations with roughly similar services--a condition considered essential for legitimate comparisons. A discussion of the proposed and current programs of financial aid displayed in Table 1 serves to clarify the conceptual dilemma cited in this paragraph.

Table 1

State Programs for Student Financial Aid in Fiscal Year 1976
(in thousands of dollars)

| Program | |
|---|---|
| **Current System** | |
| State Scholarship | $ 7,000 |
| Incentive | 2,200 |
| Tuition Aid Grants | 2,800 |
| County College Graduate | 266 |
| Educational Opportunity Fund | 15,936 |
| | $28,202 |
| **Commission Proposal** | |
| Undergraduate Need-Based Aid | $72,385 |
| Student Aid Adjustment Fund | 2,172 |
| Merit Aid | 4,950 |
| Graduate Fellowship Program | 825 |
| Out-of-State Aid Awards | 2,050 |
| | $82,382 |

Sources:

Current System - State of New Jersey Budget '76 Fiscal Year '77, Department of Higher Education. February 3, 1976.

Commission Proposal - New Jersey Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), Appendix II, December 1976.

The current higher education appropriation provides funding for five undergraduate student grant aid programs each distributing funds on the basis of different award criteria. The Commission proposes four new student aid programs each designed to assist a distinctive student sub-population.[1] For instance, the proposed Undergraduate Need-based Aid program would serve many of the same constituencies currently provided for under the Incentive, County College Graduate and Educational Opportunity Fund (EOF) programs. The Educational Opportunity Fund however currently disburses approximately $3.5 million of its appropriation directly to institutions in the form of supplementary program grants to support special services required by these aid recipients. State support of proposed remedial programs has yet to be established due to a lack of data. The proposed Merit Aid program would supplant the current State Scholarship Program. However, the award criteria used to select candidates and calculate individual grant amounts would be substantially altered. In addition, the proposed Student Aid Adjustment Fund and Graduate Fellowship Program have no counterparts in the present appropriation. Therefore, while analyzing each program individually might be desirable, most of the aid programs in the two systems are not designed to achieve similar goals for like groups of students. Comparability at the program level thus would yield genuinely meaningful results and can be better achieved at the next level of aggregation, that of grouping programs into several general categories.

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[1] Out-of-state aid awards include funding for prior State Scholarship award "winners" who are obtaining their higher education outside of New Jersey and are held "harmless" under the proposed system.

Grouping the major components of the current and proposed financing systems into the expenditure categories of direct aid to students or institutions attempts to classify individual programs by common function. This dichotomy of postsecondary education finance is commonly accepted within the higher education community and was deemed applicable by the Commission staff for the purposes of this report. The majority of the components of both the current and recommended systems can be easily classified into one of these broad expenditure categories.

The analysis and findings presented in the following pages are based on certain common guidelines applied to both financing plans. The most general of these are stated below while other specific concerns are addressed where they are relevant.

- Allocations for debt service and capital construction carried in the higher education budget are not included in any subsequent analyses.
- All expenditures are in 1976 dollars.
- Current higher education expenditures are derived from the adjusted FY 76 appropriation as listed in the Governor's Budget for FY 76-77, and the actual disbursement of student aid awards as compiled from data provided by the New Jersey Office of Financial Assistance.
- Commission higher education expenditures are derived from a simulation model developed by the staff to "cost out" and analyze its recommendations based on certain assumptions laid out at the beginning of the model.

## A Budgetary Overview

New Jersey's postsecondary education appropriation is summarized in Table 2 for the current system and Commission proposal. This display shows differential funding levels for the total state appropriation, student financial aid, institutional aid and special aid items. Major shifts in the distribution of state support for postsecondary education are illustrated by absolute dollar changes within major expenditure categories in the context of the postsecondary education budget as a whole. More specific changes in financing patterns are dealt with in subsequent discussions.

Table 2

State Support for Postsecondary Education in FY76
(in thousands of dollars)

| Expenditure Category | Current System | | Commission Proposal | |
|---|---|---|---|---|
| | $ | % | $ | % |
| Student Financial Aid | 28,202 | 10.3 | 82,382 | 24.5 |
| Institutional Aid | 192,270 | 70.2 | 200,001 | 59.5 |
| Special Aid Categories | 53,586 | 19.5 | 53,706 | 16.0 |
| Thomas Edison College | 380 | | 500 | |
| Agricultural Experiment Station | 7,166 | | 7,166 | |
| CMDNJ | 41,760 | | 41,760 | |
| DHE Administration | 2,700 | | 2,700 | |
| Vetinary Medicine Program | 80 | | 80 | |
| Schools of Professional Nursing | 1,500 | | 1,500 | |
| Grand Total | 274,058 | 100.0 | 336,089 | 100.0 |

Sources: Current System - State of New Jersey Budget '76 Fiscal Year '77, Department of Higher Education. February 3, 1976.

Commission Proposal - "Financing in an Era of Uncertainty" (Draft) New Jersey Commission on Financing Postsecondary Education, Appendix II, December 1976.

The budget recommended by the Commission for postsecondary education constitutes an addition of $61 million or 22.4% over the $274 million spent on higher education by New Jersey in fiscal year 1976. The major share of the $61 million increment, over $53 million, is utilized to increase the student financial aid allocation from $28.2 to $82.4 million (see Table 1 for a listing of specific programs). This increase of roughly 250% in student aid funding enlarges its share of the total budget from just over 10% to nearly 25%.

Direct state subsidies to institutions are increased by approximately $8 million by the Commission proposal. However, the $8 million added to the expenditure category of institutional aid constitutes only a 4% increase over present levels. Consequently the proportion of state funding allocated to direct support of institutions drops from slightly over 70% to just under 60% of the total postsecondary education appropriation.

The shifts in the proportion of the state budget allocated to each of the two major postsecondary education expenditure categories underscores a basic thrust of the Commission's recommendations--a larger proportion of higher education funds should be distributed to students directly through programs of financial aid and a smaller percentage through direct subsidies to institutions.

The final expenditure category is that of special aid items. The dollar amount for each entry in this category, except Edison College, is identical reflecting either the Commission's implicit endorsement of their continuance at current levels or the fact that the Commission did not have adequate time or resources to carefully investigate these areas, e.g. the College of Medicine and Dentistry (CMDNJ). The appropriations for Edison College are increased by $120,000 to enable it to assume the additional responsibilities proposed in the Commission's final report.

## Sector Comparisons

State expenditures assigned to the expenditure categories of student and institutional aid in the budgetary overview are distributed to the various institutional sectors in New Jersey in this section of the report. State monies received by each of the institutions sectors are analyzed--by expenditure category--student financial aid, institutional aid, followed by a total of these two categories, or total state aid by sector. The reader is advised against reaching any firm conclusions concerning the data before examining the tables on total state aid because of the inter-relationship between the student and institutional aid. Although these two programmatic categories are separated for analytical purposes they are interdependent from a public policy standpoint. The financing strategy proposed by the Commission reflects this interdependence when compared to the current system because in every case where institutional subsidies have been reduced there is an increase in the student aid received by the corresponding sectoral enrollments, and vice versa.

### Student Financial Aid

Student financial aid includes all funds disbursed directly to students for the expressed purpose of assisting them to finance the cost of their education. State student aid funds are assigned to the institutional sectors in this report by identifying all state aid recipients by sector and aggregating their award amounts.

There are several criteria currently used to determine recipients of grant awards from the various state student aid programs. Generally speaking,

an estimation of the family's financial circumstance and/or a measure of the student's academic ability are included. In some cases individual aid awards are designed to be sensitive to the student's choice of institution. Most often, the variable of institutional choice is included as an award criteria by incorporating the tuition faced by the student in the determination of the state financial aid award. Occasionally, however, enrollment in a particular institutional sector or location, e.g. a proprietary school or outside of New Jersey, can foreclose eligibility in certain aid programs. The data on student aid is presented in Table 3 by institutional sector in full recognition of the fact that these funds are not budgeted for use in a specific sector but disbursed to New Jersey students according to various financial and/or academic criteria regardless of institutional sector.

Table 3

The Distribution of State Student Financial Aid by Sector in FY 76

| Sector | Current System | Commission Proposal |
|---|---|---|
| County Colleges | $ 3,986,041 | $ 2,178,290 |
| State Colleges | 5,532,823 | 5,287,500 |
| NJIT | 245,423 | 1,879,000 |
| Rutgers | 4,195,647 | 16,410,990 |
| Independents | 6,651,033 | 34,201,500 |
| Proprietaries | --- | 18,232,000 |
| Total | $20,610,967 | $78,189,280 |

Sources: Current System - NJ Commission on Financing Postsecondary Education, "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1965," June 1976. Commission Proposal - NJ Commission on Financing Postsecondary Education, "Financing in an Era of Uncertainty," (Draft), Appendix II, December 1976.

The current state budget allocation for student financial aid programs shown in Table 3 totals $20.6 million which is substantially less than the comparable number of $28.2 cited in Table 2. This discrepancy is a result of several adjustments required to present a New Jersey sectoral analysis of student aid. First, the definition of student financial aid used here necessitates that any student aid program funds not allocated to students but rather to institutions or the state department of higher education for special purposes, e.g. state funds to support special programs or administrative costs, not be included in the calculations to follow. Second, all financial aid awards made to New Jersey residents attending out-of-state institutions of higher education can not be allocated to a New Jersey institutional sector and therefore such monies are excluded from the analysis in this section. Finally, the expenditures shown in Table 2 for the current system are derived from actual appropriations for FY76 as listed in the Governor's Budget for FY76-77. The comparable amounts in Table 3 are based on the actual disbursement of these appropriations to students. Student financial aid disbursements were provided by the New Jersey Office of Financial Aid and included aid awards allocated under the State Scholarship, Incentive Scholarship, Tuition Aid Grant, County College Scholarship and Educational Opportunity Fund programs.

The Commission's financial aid total presented in Table 3 of $78.2 million also differs from the $82.4 million student aid figure displayed in Table 2. Again, the category of out-of-state awards are eliminated from consideration. In addition, the Student Aid Adjustment Fund cannot be allocated to the sectors at this time because this program was designed by the Commission to:

"establish a fund which allows campus aid officers to adjust student grant awards in light of special circumstances not recognized by the formula."[2]

Three Commission student aid programs are allocable to the institutional sectors of New Jersey.

In the final report the distribution of graduate fellowships comprises an allocation of $750,000 to Rutgers and $75,000 to doctoral students attending NJIT. Undergraduate need-based awards were allocated via a computer simulation model. The simulation model combined the proposed award criteria with the financial status of eligible families as they were distributed throughout New Jersey's postsecondary education institutions in 1976. Individual award amounts can then be computed and extrapolated over sector enrollments.[3] The distribution of Commission merit aid funds to the sectors was approximated to be the same as that of the current State Scholarship Program. The award criteria for the State Scholarship Program considers both student merit and financial need; the proposed merit aid program would make awards based solely on academic ability. Although the award criteria for these two programs are not precisely the same, they are similar, and this procedure was the only avenue available if these two programs were to be included in the analysis.

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[2] NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft). Section 2, Recommendation 8, page 57.

[3] The Commission model assumes that every eligible student who is eligible applies for aid and receives the appropriate amount. The simulation also assumes that all proprietaries except cosmetology and charm/modeling schools would meet stiff new standards and that students attending these institutions have an income distribution identical to that found at the two year colleges.

The data presented in Table 3 are derived in light of the tuition levels estimated for each of the sectors. Several important points raised by the figures in this display deserve note:

- New Jersey student aid expenditures rise almost 400% under Commission recommendations from $20,611,000 to $78,190,000.
- The student bodies of New Jersey's independent institutions are projected to receive the largest absolute increase in aid dollars totaling almost $28 million.
- The gain to New Jersey proprietary institutions is not as large in absolute dollars, $18 million, but more dramatic considering their current ineligible status for any state financial aid funds.
- Current outlays for students attending Rutgers are quadrupled in the aggregate while student aid expenditures supporting NJIT students are increased by over 700 percent.
- State student aid at the county colleges drops by almost one-half under the Commission proposal while financial aid to the state colleges remains relatively unchanged.

Institutional Aid

Aid to institutions includes all funds flowing directly from state sources to New Jersey colleges and universities less any revenues returned to the state treasury. State institutional aid funds are analyzed in this section as a total sector appropriation and as a subsidy per student. Institutional support per student is a relevant statistic because it relates the total sector appropriation to the size of the student population. In addition, New Jersey presently allocates the majority of its institutional aid on the basis of student enrollments.

The distribution of institutional subsidies on the basis of student enrollments is frequently denoted as formula generated resources. Most higher education resource generating formulae input student enrollment data and combine these inputs mathematically with a set of parameters to yield a state subsidy level for the institutions. These formulae can be complex, requiring detailed student enrollment data, i.e. by program and/or level, and parameter values covering average faculty salaries, class size, teaching loads, etc. New Jersey currently employs differential parameter values for generating resources to different sets of institutions, i.e. sectors. Both the current and proposed system utilize student enrollment data in the generation of institutional support, however there are significant differences in approach which are discussed later in this section.

Public agencies also disburse aid to institutions on an individual project basis without explicit regard to student enrollment. Subsidies allocated in this manner are considered non-formula resources in the current system and line item appropriations in the Commission proposal. The terms by which these resources are denoted is only important insofar as current non-formula resources are not identified in the state's higher education appropriation. Non formula resources are only broken out completely in the Annual Board of Higher Education Budget Request which does not list the corresponding appropriation.

Table 4 displays state subsidies to the various institutional sectors on a per student basis.

Table 4

Distribution of State Aid to Institutions per Full-Time Equivalent Student by Sector in FY 76

| Sector | Current System[a] | Commission Proposal[b] |
|---|---|---|
| County Colleges | $ 600 | $1,137 |
| State Colleges | 1,179 | 1,158 |
| NJIT | 2,491 | 2,095 |
| Rutgers | 2,062 | 1,357 |
| Independents | 132 | --- |
| Proprietaries | --- | --- |

[a] All subsidy levels for public institutions are listed in the Governor's Budget under "Direct State Support per Full-Time Equated Student" (Budgeted FY 76). The direct support per independent sector student is derived from the FY 76 appropriation to COG and SPUR programs divided by their student enrollment.

[b] All figures are listed under "Educational Cost Subsidy Level," NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), Appendix II, December 1976.

The Commission subsidy levels in Table 4 reflect only formula resource allocations, while the corresponding subsidies for the current system include resources allocated on both a formula and non-formula basis. Although the two sets of figures in Table 4 are not totally comparable, the impact of non-formula appropriations across sectoral enrollments is not significant.

Subsidy levels and total state postsecondary budget costs are simulated by the Commission staff on the basis of the actual number of students attending New Jersey's colleges and universities in FY 76. Subsidy levels for the current system however are based on state projected or budgeted enrollments. Due to the requirements of any on-going public operation, current fiscal year costs must always be projected and approved in advance of the actual expenditure of those funds. Therefore current institutional aid per student is based on budgeted as opposed to actual enrollments recognizing that if the Commission proposal were implemented its recommendations would be subject to similar budgeting requirements.

The following example is presented to clarify the issue. State law mandates that state aid to county colleges be disbursed on the basis of $600 per FTE (see Table 4). However in recent years the number of students registering at community colleges in the following fall has been higher than the enrollments published in the Governor's Budget from which state aid is calculated. Therefore state aid per actually enrolled county college student was actually some $50 less than the $600 budgeted in fiscal 1976.

The information presented in Table 4 serves to illustrate several fundamental changes in the state's method for allocating financial resources to higher education institutions. In the independent sector, the Commission

recommended that direct state subsidy programs be terminated and replaced with student aid.

> "State financial support to New Jersey's independent colleges and universities should be continued but provided through financial aid to students attending these institutions."[4]

Regarding public sector institutions, the staff wishes to focus initially on the numerical range of subsidy levels. Current subsidy levels range from a low of $600 per FTE at the community college sector to a high of $2,491 per FTE at NJIT, a range of almost $1,900 per student. This wide range is a consequence of current state allocation formulae which treat the various public sectors differently, in terms of the salary levels, class size and teaching levels the state is willing to underwrite. The range of institutional aid per full-time student under the Commission's proposals is from $1,137 at the community college sector to $2,095 for NJIT, a spread of less than $1,000 per student. Narrowing the range of institutional subsidy levels is a desired outcome of the Commission's recommendation for like state support for all like public sector students.

> "The state should provide to all public institutions equal subsidies for each undergraduate student enrolled in the same program..."[5]

Operationally, this means the state would implement a single formula and unified set of parameters to generate subsidies to all public sector institutions. State institutional aid would equal 60% of appropriate programmatic expenditures as compared to the current level of 70% averaged across all public 4-year student enrollments.

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[4] NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), Section 2, Recommendation 4, p. 36.

[5] Ibid., Section 2, Recommendation 1, p. 28. For a listing of the twelve suggested program categories (5 undergraduate and 7 graduate), see NJ Commission on Financing Postsecondary Education. "Simulating Alternative Financing Strategies for Postsecondary Education in New Jersey." Princeton, New Jersey, 1976.

Several specific outcomes of the proposed recommendation for "like state support of like students," in terms of per student subsidy levels include:

- The largest beneficiary of like support is the community college sector which would receive on average an additional $537 per student--almost double its current aid level of $600.
- The highest level of institutional subsidy under Commission recommendations remains NJIT (due to its concentration of high cost engineering and technical programs). However, its per student subsidy level drops some $400 to $2,095 per student.
- The Commission plan reduces the per student subsidy level at Rutgers by $780 from the 1976 state allocation of $2,062 per student.

Table 5 displays the total amount of dollars distributed by New Jersey to the various institutional sectors within the state by the two financing systems. All subsidies in Table 5 include both formula and non-formula generated resources. Non-formula resources are denoted as line item appropriations in the Commission's cost simulation model if the reader wishes to consult a copy of the print-outs.

Table 5

Aid to Institutions - Total Subsidy
(in thousands of dollars)

| Sector | Current System | Commission Proposal |
|---|---|---|
| County Colleges | $ 31,575 | $ 65,367 |
| State Colleges | 69,637 | 71,259 |
| NJIT | 9,867 | 10,323 |
| Rutgers [a] | 75,191 | 53,052 |
| Independents | 6,000 | --- |
| Proprietaries | --- | --- |
| Total | $192,270 | $200,001 |

[a] Does not include $7,166,000 allocated for the Agricultural Experiment Station accounted for in the Special Aid Category, Table 1.

Sources: Current System - State of New Jersey Budget '76 Fiscal Year '77, Department of Higher Education. February 3, 1976.

Commission Proposal - New Jersey Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), Appendix II, December 1976.

As one might expect, many of the same general patterns cited in the prior discussion of institutional aid per student are evidenced again in Table 5. The community colleges again receive the largest amount of additional subsidy while the state's direct institutional aid allocation to Rutgers is reduced substantially. As before, subsidies to the independent institutions are eliminated while aid to the state colleges remains relatively constant. The only significant departure in this discussion from the observations made regarding the data in Table 4 relates to NJIT. NJIT, while exhibiting a decrease in per student funding in Table 4, now shows a slight increase in total subsidy dollars. This "quirk" in the data is due to over $2 million in line item appropriations allocated by the Commission to support research and auxiliary enterprises at NJIT.[6]

State Aid

State aid to postsecondary education includes all New Jersey dollars appropriated directly to institutions through state subsidies or to students through financial aid. The purpose of this concluding portion of sector comparisons is to observe aggregate shifts in state aid for each institutional sector and to describe the nature and components of these changes.

Table 6 displays the total amount of state aid allocated to each institutional sector. These figures presented by sector are the sum of the student aid funds exhibited in Table 3 and the institutional subsidy totals shown in Table 5.

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[6] $2 million in line item appropriations allocated by the Commission to NJIT reflects the high cost of operations at this institution caused by its small size within an urban environment.

Table 6

Total Institutional and Student Aid by Sector
(in thousands of dollars)

| Sector | Current System | Commission Proposal |
|---|---|---|
| County Colleges | $ 35,561 | $ 67,545 |
| State Colleges | 75,170 | 76,547 |
| NJIT | 10,112 | 12,202 |
| Rutgers | 79,387 | 69,463 |
| Independents | 12,651 | 34,202 |
| Proprietaries | --- | 18,232 |
| Total | $212,881 | $278,191 |

The recommendations made by the Commission would increase state expenditures on student and institutional aid programs allocable to sectors by $65 million.[7] $32 million of this increment is distributed to New Jersey's community colleges as a result of increased levels of county college subsidy. The proprietary institutions receive $18 million of the added state funding on the basis of the inclusion of their students in the Commission's major student aid program.

> "New Jersey residents who matriculate in non-collegiate postsecondary education programs should be eligible to receive state student assistance."[8]

State aid to New Jersey's independent colleges and universities increase despite the fact that direct state subsidies to the independent sector are discontinued by the Commission's recommendations. Total state aid to this sector is anticipated to increase two-and-one-half-fold based on the student aid allocation procedures recommended by the Commission and the student enrollment patterns in 1976. The reduction in total state funds which would be applied at Rutgers of $10 million results from an increase of $12 million in student aid allocations combined with a $22 million decrease in institutional subsidies. State aid to NJIT climbs modestly by $2 million while the state colleges gain $1 million in state support.

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[7] This $65 million differential between state aid appropriated under the current system and Commission proposal only includes state monies which can be allocated to one of the institutional sectors. The funds used in these calculations therefore do not include all the components considered in the Budgetary Overview section where the state expenditure differential was $61 million for the student and institutional aid categories.

[8] NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft). Section 2, Recommendation 11, p. 63.

A discussion of Table 7 ends this sectoral analysis with a look at the changing sources of state funds which result from implementing the Commission's recommendations. The sources of state funding refer to the major expenditure categories of student and institutional aid. These categories can be considered different sources of state funding from an institutional or sectoral perspective because they reach the institution from either the state or the student directly.

Table 7

Percentage of State Aid Distributed as Student and Institutional Aid

| | Current System | | Commission Proposal | |
|---|---|---|---|---|
| Sector | % Student Aid | % Institutional Aid | % Student Aid | % Institutional Aid |
| County Colleges | 11.2% | 88.8% | 3.2% | 96.8% |
| State Colleges | 7.4 | 92.6 | 6.9 | 93.1 |
| NJIT | 2.4 | 97.6 | 15.4 | 84.6 |
| Rutgers | 5.3 | 94.7 | 23.6 | 76.4 |
| Independents | 52.6 | 47.4 | 100.0 | --- |
| Total | 9.7% | 90.3% | 28.1% | 71.9% |

All figures presented in Table 7 were derived by dividing each expenditure category amount displayed in Tables 4 and 5 by the appropriate state aid total shown in Table 6. For all postsecondary education, the percentage of state aid funds distributed directly to institutions falls from over 90% to less than 72% while student aid expenditures as a proportion of state aid rises from almost 10% to roughly 28%. Notice that these percentages do not agree precisely with those presented in Table 2 where state appropriations were not allocated to the institutional sectors and an additional expenditure category of special aid items was included in the state aid totals. The percentages cited above however again illustrate the Commission's major financing strategy of emphasizing student financial aid programs over subsidies to institutions. This Commission financing strategy is clearly evidenced by the results shown for NJIT, Rutgers and the independent sector. In each instance student aid comprises a significantly larger proportion of their state allocation than under present procedures. At the community college sector this trend is reversed due to the large additions made to their current state subsidy account in accordance with the "like support for like students" criteria.

## Student Comparisons

The ultimate concern of a postsecondary education system in the final analysis is the education of individual students. Therefore it is imperative that this report deal with the impact of both the current and recommended financing systems on the individuals who constitute the New Jersey student body. It is important to reiterate that the Commission has placed primary emphasis on a greater student focus in formulating and evaluating public policy in the area of postsecondary education finance.

### Effective Tuition and Fees

A crucial aspect of any postsecondary education financing system is the price students are required to pay for instructional services at various institutions. Two components must be considered with regard to the amount students actually pay; the tuition and fees charged by the institution to its students and the amount of student financial aid distributed to discount or offset these charges. The non-discounted tuition and fees charged by an institution or sector is denoted in this report as the "full" tuition and fees cost. The discounted price or out-of-pocket cost of instruction at a higher education institution is known herein as the "effective" tuition. The effective tuition is the amount of student financial aid received by a student subtracted from the full tuition charged to that student.

The price of postsecondary education faced by the student and family includes two distinct components of which tuition and fees are only the first. Student living expenses while obtaining a postsecondary education, otherwise known as maintenance costs, comprise the second component of a student budget. New Jersey student financial aid programs have traditionally targeted the overwhelming majority of their funds to support full tuition charges, with only a small proportion of the appropriation spilling over to subsidize student maintenance.[9] The Commission's plan is in agreement with this general approach and earmarks specifically its entire undergraduate student aid allocation for the support of tuition and fee charges with the explicit exclusion of maintenance considerations.

> "The state need-based aid program for students should be designed to offset tuition and fee charges only."[10]

The effective price obtained by deducting state student financial aid from the full tuition therefore yields comparable statistics for the current and proposed system. Although this effective price could be further offset by student aid from non-state sources, i.e. federal student financial aid, this section limits its inquiry to the effect of state student aid financial programs on the tuition and fee charges faced by New Jersey students, while the effect of federal student aid programs on the cost of college attendance is addressed in the appendix.

Effective tuition and fee levels are a critical factor in the analysis of any postsecondary education financing system because it reflects major policy decisions regarding both institutional and student aid allocation strategies while measuring their impact on the price faced by each student

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[9] Educational Opportunity Fund awards presently may exceed full tuition and fee charges by as much as several hundred dollars at public institutions.

[10] NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), Section 2, Recommendation 8, p. 54.

in acquiring a postsecondary education. These interrelationships are illustrated in the following discussion outlining the procedure for estimating effective tuitions under the Commission's proposals.

Estimating Commission effective tuition levels is a three step process. Initially, the full tuition at each sector must be calculated. Full tuitions are determined in the Commission cost simulation model as the difference or revenue gap between the average institutional expenditure per student and the average institutional subsidy per student.[11] This technique can be effectively utilized in the public sector where the combination of institutional subsidies and tuition and fee revenues comprise the majority of their financial resources.

The distribution of the Commission's undergraduate need-based program is a function of full tuition charges and the family income of the student. Family income is adjusted according to the standard deductions for a family of four as compiled by the College Scholarship Service. The adjusted family income is converted into a measure of ability to pay by considering the state institutional subsidy allotted in support of that student and the relative full price of the institution.

> "In the determination of the expected monetary contribution to be made by the undergraduate student's family, the state institutional subsidy allocated in support of that student at public institutions must be taken into account."[12]

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[11] Institutional expenditures per student refer to the operating costs of the institution and do not include allocations for debt service.

[12] NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), December 1976, Section 2, Recommendation 8, p. 55.

> "As the affluence of the family increases, families of students who choose to enroll in relatively more expensive institutions should pay a larger portion of the costs."[13]

In the majority of cases, undergraduate need-based aid awards equal the full tuition charged less the contribution of the student and family.

> "The state should establish a single undergraduate student grant aid program in which financial aid is awarded on the basis of tuition costs and the ability of the student and his or her family to pay."[14]

Finally, effective tuition rates under the Commission proposal equal the difference between the full tuition estimated at an institutional sector and the average need-based aid award for a particular income group member enrolled in that sector. The merit aid and student aid adjustment fund cannot be included in the effective tuition analysis because their distribution by income group cannot be determined in advance by the staff.

The resulting effective price is considered by many in higher education to constitute a measure of student financial access--a major goal of the New Jersey postsecondary education system. Tables 8 and 9 display effective tuition and fee levels for the current system and the Commission's proposal respectively.

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13 NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), December 1976, Section 2, Recommendation 8, p. 55.

14 Ibid., p. 52.

Table 8

Current Average Effective Tuition and Fees
Per Full-Time Equivalent Student in FY76

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | Independents | Proprietaries |
|---|---|---|---|---|---|---|
| $0 - 2,999 | 152 | 265 | -289 | 43 | 1,805 | 2,123 |
| 3,000 - 4,999 | -24 | 294 | 398 | 20 | 1,949 | 2,123 |
| 5,000 - 7,499 | 294 | 512 | 545 | 342 | 2,079 | 2,123 |
| 7,500 - 9,999 | 420 | 629 | 629 | 566 | 2,254 | 2,123 |
| 10,000 - 14,999 | 456 | 715 | 695 | 717 | 2,530 | 2,123 |
| 15,000 - 24,999 | 456 | 721 | 700 | 721 | 2,626 | 2,123 |
| 25,000 and over | 456 | 724 | 702 | 730 | 2,671 | 2,123 |

Table 9

Commission Average Effective Tuition and Fees
Per Full-Time Equivalent Student in FY76

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | Independents | Proprietaries |
|---|---|---|---|---|---|---|
| $0 - 2,999 | 0 | 0 | 0 | 0 | 95 | 803 |
| 3,000 - 4,999 | 0 | 129 | 129 | 129 | 216 | 803 |
| 5,000 - 7,499 | 145 | 353 | 396 | 383 | 464 | 803 |
| 7,500 - 9,999 | 241 | 503 | 612 | 586 | 688 | 803 |
| 10,000 - 14,999 | 241 | 507 | 749 | 706 | 929 | 844 |
| 15,000 - 24,999 | 241 | 524 | 1,215 | 1,134 | 1,896 | 1,948 |
| 25,000 and over | 241 | 535 | 1,454 | 1,408 | 2,672 | 2,123 |

The effective tuitions presented in Tables 8 and 9 were derived by deducting average student aid awards from the full tuitions for both current and proposed systems. The average student aid award amounts used in these calculations are exhibited in Appendix A, Tables A and B.

The average state student aid awards for the current system displayed in Appendix A Table A are based on the disbursement of these awards and the student enrollment patterns for the fiscal year of 1976. All current state student aid programs are included in these figures with the exception of State Scholarships. Since the Commission Merit Aid Program would be funded at the same level as the current State Scholarship but could not be distributed by income group the effective tuition levels of both plans are comparable only if both programs are excluded from the calculations.[15] The distribution of all current student aid funds by family income group and sector is shown in Table C. State Scholarships are included in this table for display purposes only and are not incorporated in the following computations. The total state award amounts listed in Appendix A Table C by sector and family income group are divided by the undergraduate in-state FTE enrollments (see Appendix A Table D) to yield student aid by income group for the current system.

The analytic framework used in these effective tuition comparisons is based on student aid awards averaged over all students by sector and family income group. In reality, some aid recipients receive awards in excess of this average, while others receive less than the average or possibly nothing at all, depending on family circumstances other than

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[15] The figures in Table A do include state allocations to students under the Education Incentive Program.

income and sector. The effective tuitions discussed below refer to average amounts across all students attending a particular institutional sector from a family within a given income group.

The following observations focus attention on the changes in effective tuition and fees charged within each institutional sector for students from each income group.

- Effective tuition and fees at the community colleges are reduced for all income groups except the $3,000 - 4,999 group by the Commission's proposal. Students from this lower income group presently receive large amounts of EOF assistance which exceeds full tuition and fees on average. Students from all other income groups benefit from the Commission recommendations primarily on account of the additional state subsidies to the county colleges.
- All state college students pay lower effective tuition and fee rates on average than currently. The largest effective price reduction is received by state college students from families earning less than $5,000.
- The effective price of attending NJIT under the Commission plan is lowered for all students with family incomes between $3,000 - $10,000 and are increased for students from families earning over $10,000. This outcome results from higher full tuition and fee levels at NJIT accompanied by increased financial aid funds for students from lower family incomes to offset these higher charges.
- Effective tuition and fees at Rutgers are reduced under the Commission plan for students with family incomes below $15,000. Increased Commission allocations for state student financial aid to this sector

is the major contributor to this result. Rutgers students from families earning above $15,000 would pay a higher effective price under the Commission plan primarily on account of the higher full tuitions estimated for Rutgers.

- Students enrolled in New Jersey independent colleges and universities from families earning less than $25,000 pay less in effective tuition and fees under the Commission's recommendations. The expansion in student aid funding and its disbursement based on full tuition charges and the family's ability to meet these costs is primarily responsible for the improved financial status of these students.
- Proprietary school students from all income groups except the over $25,000 group face reduced effective prices under the Commission's financing system. Recommendations calling for the inclusion of proprietary students in the state's student aid program clearly cause this result.
- In general, students under the Commission's plan will have greater opportunity to choose between public and private institutions offering similar academic programs. The absolute price differential, particularly for low and middle income students, are reduced between the state and independent institutions, and the county college and proprieatary institutions.

Intersectoral Ratios

Whereas the effective price of tuition and fees within a sector was termed a measure of student financial access, the effective price differential between sectors can be considered an index of student choice. The staff therefore constructed a set of intersectoral effective tuition and fee ratios which are displayed in Tables 10 and 11 for the current and proposed systems respectively. The intersectoral effective tuition and fee ratios are calculated by dividing the effective tuition in every sector within an income group by the effective tuition of the state colleges in that income group. The intersectoral ratio for state colleges is therefore always "1.0."

Table 10

Current Intersectoral Effective Tuition and Fee Ratios
(State Colleges = 1.0)

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | Independents | Proprietaries |
|---|---|---|---|---|---|---|
| $0 - 2,999 | 0.6 | 1.0 | 0.0 | 0.2 | 6.8 | 8.0 |
| 3,000 - 4,999 | 0.0 | 1.0 | 1.4 | .1 | 6.6 | 7.2 |
| 5,000 - 7,499 | 0.6 | 1.0 | 1.1 | 0.7 | 4.1 | 4.1 |
| 7,500 - 9,999 | 0.7 | 1.0 | 1.0 | 0.9 | 3.6 | 3.4 |
| 10,000 - 14,999 | 0.6 | 1.0 | 1.0 | 1.0 | 3.5 | 3.0 |
| 15,000 - 24,999 | 0.6 | 1.0 | 1.0 | 1.0 | 3.6 | 2.9 |
| 25,000 and over | 0.6 | 1.0 | 1.0 | 1.0 | 3.7 | 2.9 |

Table 11

Commission Intersectoral Effective Tuition and Fee Ratios
(State Colleges = 1.0)

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | Independents | Proprietaries |
|---|---|---|---|---|---|---|
| $0 - 2,999[1] | --- | --- | --- | --- | --- | --- |
| 3,000 - 4,999 | 0.0 | 1.0 | 1.0 | 1.0 | 1.7 | 6.2 |
| 5,000 - 7,499 | 0.4 | 1.0 | 1.1 | 1.1 | 1.3 | 2.3 |
| 7,500 - 9,999 | 0.5 | 1.0 | 1.2 | 1.2 | 1.4 | 1.6 |
| 10,000 - 14,999 | 0.5 | 1.0 | 1.5 | 1.4 | 1.8 | 1.7 |
| 15,000 - 24,999 | 0.5 | 1.0 | 2.3 | 2.2 | 3.6 | 3.7 |
| 25,000 and over | 0.5 | 1.0 | 2.7 | 2.6 | 5.0 | 4.0 |

[1] The ratios for this lowest income group cannot be calculated because the effective state college tuition = 0.

Intersectoral effective tuition ratios are essentially a comparison of the effective tuitions for a given income group relative to that of state colleges. Effective tuitions are a function of the full tuition charged and average state student aid awards. The average student aid award received by a student is dependent in turn on the total enrollment of students in that sector/income group and the total amount of aid dollars distributed to the particular group. Table 10 shows that Rutgers students from families earning less than $10,000 currently pay a lower effective price than their counterparts at the state colleges. These data reflect the fact that Rutgers enrolls a relatively smaller proportion of low income students than the state colleges and the ability of Rutgers to apply larger average amounts of state student aid to its low income student population.

Intersectoral effective tuition ratios are particularly important at the independent and proprietary, or non-public sectors because their ability to compete with subsidized public institutions for students in similar academic programs is influenced by price differentials. The Commission system reduces the intersectoral ratios at the two non-public sectors to less than twice the effective state college price for families with incomes below $15,000 with one exception. The current effective price differentials displayed in Table 10 range between 4.3 to 1 to 3.1 to 1 in the independent sector and from 8.0 to 1 to 2.9 to 1 at proprietary institutions depending on the income group. In general, the effective price differentials faced by a student in the current system decrease as his or her family income increases. Commission strategies seek to

relate rises in the intersectoral ratio to increases in family income in the non-public as well as public sectors on the assumption that the relative importance of price differentials as a criteria for student choice declines as family income increases.

At Rutgers and NJIT, current intersectoral ratios generally hover around 1.0 except for the three lowest income groups at Rutgers. The comparable Commission ratios remain close to 1.0 for the lower income groups but rise steadily to over 2.5 for students from families with incomes in excess of $25,000. The county colleges are the least expensive sector to attend under both systems although Commission ratios exhibit a slow but continual growth with family income.

Two general patterns are evidenced by the Commission figures shown in Table 11. First, intersectoral ratios displayed for each of the sectors increase along with family income and second, the effective price differentials faced by a given student is dependent on his or her family income. These patterns can be traced to the proposed expansion of student aid funding and their recommended allocation process. A heavy reliance on student financial aid distributed on the basis of full tuition and family ability to pay tends to eliminate effective price differentials for many low income students. The recommended procedure for calculating a family's ability to pay helps to produce the spread in ratio values as income increases.

> "As the affluence of the family increases, families of students who choose to enroll in relatively more expensive institutions should pay a larger portion of the costs."

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16 NJ Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), December 1976, Section 2, Recommendation 8, p. 55.

## Taxpayer Equity Comparisons

The equitable distribution of the costs and benefits of higher education in New Jersey has been a major concern of this Commission since its inception. The equitable treatment of New Jersey taxpayers under current funding strategies was the subject of a major Commission technical paper entitled An Analysis of Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976. In addition to providing an in-depth look at the income redistribution effects of current state higher education expenditures an analytical framework was developed which was shown to be applicable to alternative funding systems. The following section employs this analytical framework to describe changes in taxpayer equity that would result from the implementation of the proposed system in comparison to the current distribution of monetary costs and benefits of higher education.[17]

Taxpayer equity is defined in An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976 as:

> "the distribution of higher education costs on the basis of ability to pay and commensurate with the distribution of higher education subsidies." (p. 3)

Higher education subsidies include all funds expended under the two major expenditure categories of student and institutional aid. Taxes paid in support of these subsidies are considered the costs of higher education.

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[17] The data for the current system differ slightly from those presented in An Analysis of Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976 due to information adjustments made in the interests of comparability with the proposed plan.

Comparing the costs incurred and benefits received from higher education for any income groups yields the net monetary benefits of higher education for that income group. Once the net benefits are computed for all income groups the flow of the resulting redistribution of income among the various income populations within New Jersey can be identified.

Several of the major findings and observations made in the earlier Commission report on the benefits and costs of New Jersey higher education include:

"- The net result of state support to higher education at the present time is to redistribute income to families with incomes below $5,000 and above $15,000 at the expense of those earning between $5,000 and $15,000.

- In light of the tax structure, the largest per family net state subsidy is received by those with incomes in excess of $25,000.

- The two lowest income groups are aided most through subsidies to the community colleges because roughly 44.0% of their students are enrolled in that sector.

- Families with incomes between $5,000 and $15,000 fare worst from direct subsidies to independent institutions because the differential between the taxes they pay and the percentage of benefits they receive is greatest in this sector.

- A major cause of present inequities is the current method for raising revenues in New Jersey, mainly a regressive tax structure."[18]

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[18] All findings listed above are quoted directly from "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976," NJ Commission on Financing Postsecondary Education, June 1976.

The following discussion will examine how these and other characteristics of the current system are altered by the recommendations of this Commission.

Student Financial Aid

Current student aid expenditures are increased under the proposed plan by approximately $56,750,000 across all income groups.[19] The effects of these added aid funds in terms of taxpayer equity are charted in Table 12 below.

Table 12

The Distribution of Incremental Student Aid Expenditures Under the Commission Proposal

| Column (1) Family Income | Column (2) Benefits | Column (3) Costs | Column (4) Net Benefits |
|---|---|---|---|
| $0 - $2,999 | $ 4,697,818 | $ 624,275 | $ 4,073,543 |
| 3,000 - 4,999 | 3,061,911 | 1,702,569 | 1,359,342 |
| 5,000 - 7,499 | 4,919,713 | 6,413,011 | -1,493,298 |
| 7,500 - 9,999 | 6,999,995 | 9,761,398 | -2,761,403 |
| 10,000 - 14,999 | 22,264,086 | 18,217,492 | 4,046,594 |
| 15,000 - 24,999 | 14,817,405 | 15,209,620 | -392,215 |
| 25,000 and over | -8,615 | 4,767,194 | -4,775,809 |

[19] This student aid expenditure differential of $56,750,000 is lower by roughly $825,000 than the figures aggregated in Table 3 (Student Financial Aid - Distribution by Sector) would suggest. This discrepancy is caused by an inability to predict the distribution by income group of the proposed graduate fellowship program.

The incremental student aid benefits received by each income group under the proposed plan are shown in Column (2). Incremental student aid benefits refer to the difference between the amount of student aid actually disbursed to New Jersey students in 1976, and the number of aid dollars that would have been allocated to students of families from the various income groups under the Commission's plan.[19] It should be noted that the allocation of Commission student aid funds was obtained by simulating the disbursement of the Commission's undergraduate need-based aid program in accordance with the allocation procedures outlined in the final report to eligible New Jersey students as they were distributed throughout New Jersey postsecondary education by institutional sector and family income. The simulation model disburses funds to all eligible students in the amounts suggested by the procedures outlined in the final report. The rates at which various groups of students participated in the various institutional sectors of postsecondary education as of 1976 is an important factor in the distribution of student aid benefits for the Commission proposal.

The figures listed under Column (2) of Table 12 illustrate how all income groups below $25,000 receive more student aid dollars under the Commission proposal than from current financial aid programs. Students from families earning between $10,000 - $25,000 receive the majority, 65.3%, of the $56.8 million of additional student aid expenditures. This result is consistent with the family income cut-offs of the major student aid programs of each financing system. The Educational Opportunity

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[19] State Scholarship awards are not included in the following equity calculations because of an inability to distribute the Commission's comparable Merit Aid Program by family income group at this time.

Fund generally restricts eligibility to families with incomes below $10,000. The Commission's Undergraduate Need-Based Aid Program expands eligibility up to the $25,000 level.

The costs incurred by these added student aid benefits are allocated to the New Jersey taxpayers in Column (3) of Table 12. The additional costs incurred by each group are derived by applying the percentage of New Jersey taxes paid by each income group to the incremental Commission expenses. The percentage of state taxes paid and the effective rate of taxation is displayed by income group in Appendix A Table E. New Jersey effective tax rates illustrate the regressivity of current revenue-raising procedures.

The net effects of the incremental Commission student aid expenditures are listed under Column (4) of Table 12. These net benefit amounts represent the difference between the accompanying benefit-cost data shown in Table 12.

- The $0 - 2,999 and $10,000 - 15,000 income groups receive the largest amounts of redistributed income from the student aid programs considered in this discussion.
- The largest negative net benefit shift, induced by the expanded Commission student aid plan, is received by families with incomes exceeding $25,000.
- The $5,000 - 7,500 and $15,000 - 25,000 income groups both undergo net outflows of income despite making substantial gains in student aid benefits.

Table 13 incorporates the incremental net Commission financial aid benefits into the context of the total amounts of net student aid benefits as calculated for the current and proposed systems.

Table 13

Total Net Student Aid Benefits

| Family Income | Current System | | Commission System | |
|---|---|---|---|---|
| | $'s | $'s/Family | $'s | $'s/Family |
| $0 - $2,999 | $ 4,420,233 | $11.85 | $ 8,493,776 | $ 22.78 |
| 3,000 - 4,999 | 3,257,010 | 15.00 | 4,616,352 | 21.26 |
| 5,000 - 7,499 | 1,611,034 | 5.32 | 117,736 | .39 |
| 7,500 - 9,999 | -574,645 | -1.68 | -3,336,048 | -9.74 |
| 10,000 - 14,999 | -3,818,858 | -6.49 | 227,736 | .39 |
| 15,000 - 24,999 | -3,574,697 | -8.42 | -3,966,912 | -9.34 |
| 25,000 and over | -1,304,447 | -9.76 | -6,080,256 | -45.49 |

Naturally many of the patterns observed in prior discussions are evidenced in the information presented above. The figures contained in Table 13, particularly for individual families, are important primarily as a point of reference for the reader. The dollars per family displayed above measure the net effect of student aid programs across all economic units, including families with and without children in college.

Institutional Aid

Current state institutional subsidy appropriations are modestly increased by roughly $8 million, under the proposed system. Table 14 lists the benefit and cost effects of the additional Commission allocations to the higher education institutions in New Jersey.

Table 14

The Distribution of Incremental Institutional Aid Expenditures Under the Commission Proposal

| Column (1) Family Income | Column (2) Benefits | Column (3) Costs | Column (4) Net Benefits |
|---|---|---|---|
| $0 - 2,999 | 1,975,262 | 85,047 | 1,890,215 |
| 3,000 - 4,999 | 555,920 | 231,944 | 323,976 |
| 5,000 - 7,499 | 1,060,953 | 873,654 | 187,299 |
| 7,500 - 9,999 | 1,459,946 | 1,329,811 | 130,135 |
| 10,000 - 14,999 | 2,747,741 | 2,481,798 | 265,943 |
| 15,000 - 24,999 | 674,914 | 2,072,030 | -1,397,116 |
| 25,000 and over | -746,971 | 739,442 | -1,486,413 |

The amount of institutional aid benefits accruing to each income group by a shift to the Commission plan is shown in Column (2). The highest income group actually would receive less in institutional aid benefits. This reduction is due in part to the Commission's termination of state subsidies to the independent sector where a significant proportion of these students are enrolled. The lowest income group acquires a major proportion of the incremental subsidies, in contrast to their small share of total student enrollment, because of the increased state support of the county colleges where over 40% of these students attend. Students from the $15,000 - $25,000 income group garner a relatively small share of the additional subsidies given their large proportion of state college, Rutgers and independent sectoral enrollments made up of these students.

The incremental costs incurred by each income group to provide the necessary funds to finance the Commission's institutional subsidies are presented in Column (3) of Table 14. This distribution is once again dictated by New Jersey's regressive tax structure and needs no further comment from the staff at this point.

The net benefits displayed in Table 14 are especially noteworthy when compared with the distribution of total net institutional benefits listed in Table 15. Table 15 compares total net institutional benefits for the current and Commission systems.

The data in Table 15 demonstrates the extent to which the institutional aid programs of both systems redistribute income to families with incomes below $5,000 and above $15,000 at the expense of those earning between $5,000 and $15,000. In both systems, the highest net subsidy per family is

Table 15

Total Net Institutional Aid Benefits

| Family Income | Current System | | Commission System | |
|---|---|---|---|---|
| | $'s | $'s/Family | $'s | $'s/Family |
| $0 - 2,999 | 6,983,941 | 18.73 | 8,874,156 | 23.80 |
| 3,000 - 4,999 | 1,406,117 | 6.47 | 1,730,093 | 7.97 |
| 5,000 - 7,499 | -8,316,488 | -27.48 | -8,129,189 | -26.86 |
| 7,500 - 9,999 | -14,250,088 | -41,60 | -14,119,953 | -41.22 |
| 10,000 - 14,999 | -8,521,918 | -14.48 | -8,255,975 | -14.03 |
| 15,000 - 24,999 | 16,222,054 | 38.19 | 14,824,938 | 34.90 |
| 25,000 and over | 6,815,406 | 50.99 | 5,328,993 | 39.87 |

received by those with incomes over $15,000 while families in $7,500 - 10,000 receive the lowest net benefit per family. To analyze the effect of the Commission subsidy programs the net benefit amounts in Table 14 are examined in light of the patterns observed in Table 15.

The changes in the total net benefits received by each income group in Table 15 are determined by the figures in the final column of Table 14. Of the three income groups, which are shown to suffer net outflows of income in Table 15, two of these groups acquire an improved position under the Commission plan. Families earning between $7,500 - 15,000 appear to gain from the "like support" procedure for allocating institutional subsidies. Positive net effects from Commission institutional aid proposals are also shown in Tables 14 and 15 for the two lowest income groups. Although families with incomes above $15,000 earn the highest net subsidy per family in both systems, the net effect of the incremental Commission funding is to reverse this trend. Both of these income groups receive negative net benefits in Table 14 and consequently receive less in net institutional aid benefits under the Commission system than presently.

The distribution of Commission institutional aid benefits are based as before on the participation rates of various income groups in 1976. The Commission allocation procedures concerning state institutional subsidies are responsible for all shifts in the distribution of institutional aid benefits by income group. However, student response to a new set of effective prices to attend the various institutions throughout New Jersey suggested by measures of price elasticity between the sectors to various groups of students and prospective students is not analyzed herein.

State Aid

The net effect on New Jersey taxpayers of the Commission's plan is shown in Table 16. The figures in Table 16 represent the comparable numbers displayed in Tables 13 and 15 regarding student and institutional aid respectively.

Table 16

The Distribution of Net State Aid Benefits

| Family Income | Current System | Commission System | Change (Commission-Current) |
|---|---|---|---|
| $0 - 2,999 | 11,404,174 | 17,367,932 | 5,963,758 |
| 3,000 - 4,999 | 4,663,127 | 6,346,445 | 1,683,318 |
| 5,000 - 7,499 | -6,705,454 | -8,011,453 | -1,305,999 |
| 7,500 - 9,999 | -14,824,733 | -17,456,001 | -2,631,268 |
| 10,000 - 14,999 | -12,340,776 | -8,028,239 | 4,312,537 |
| 15,000 - 24,999 | 12,647,537 | 10,858,026 | -1,789,511 |
| 25,000 and over | 5,510,959 | -751,263 | -6,262,222 |

The largest increase in net subsidy dollars induced by benefits under the Commission system is received by the lowest income group. The majority of these added net benefits are the result of Commission student aid program which substantially increases the aid funds flowing to independent and proprietary students as well as part-timers in all sectors. The second largest net inflow of income induced by the Commission accrues to the $10,000 - 15,000 income group. As in the lowest income group, families from the $10,000 - 15,000 gain significant benefits from the expanded student aid opportunities in addition to accruing a minor net benefit amount from institutional subsidies. By far the largest net outflow of income caused by the Commission plan is experienced by the highest income group. Besides losing benefits from the Commission programs, the added costs they are asked to bear ensure their overall negative net benefit position. This shift is all the more dramatic when it is considered that families with incomes over $25,000 currently receive the largest net state aid subsidy per family but accrue a negative net subsidy under the Commission plan.

In conclusion, tax inequities will persist as long as present participation rates, institutional subsidies and regressive revenue-raising methods continue. The implementation of the Commission's plan alleviates a number of the inequitable effects of these factors. However, since the Commission recommendations have little or no direct impact on a number of the causes of tax inequities, they will persist under any rational financing plan for postsecondary education.

# Appendix A

Table A

Current Student Financial Aid - Distributed Per Full-Time Equivalent Student

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | Independents | Proprietaries |
|---|---|---|---|---|---|---|
| $0 - 2,999 | 304 | 459 | 991 | 687 | 867 | --- |
| 3,000 - 4,999 | 480 | 430 | 304 | 710 | 723 | --- |
| 5,000 - 7,499 | 162 | 212 | 157 | 388 | 593 | --- |
| 7,500 - 9,999 | 36 | 95 | 73 | 164 | 418 | --- |
| 10,000 - 14,999 | --- | 9 | 7 | 13 | 142 | --- |
| 15,000 - 24,999 | --- | 3 | 2 | 9 | 46 | --- |
| 25,000 and over | --- | --- | --- | --- | 1 | --- |

Sources: NJ Commission on Financing Postsecondary Education. "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976," June 1976.

Enrollment data based on Data Briefs and Student Resource Survey (SRS) information.

Table B

Commission Student Financial Aid - Distributed Per Full-Time Equivalent Student

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | Independents | Proprietaries |
|---|---|---|---|---|---|---|
| $0 - 2,999 | 241 | 535 | 1,454 | 1,408 | 2,577 | 1,320 |
| 3,000 - 4,999 | 241 | 406 | 1,325 | 1,279 | 2,456 | 1,320 |
| 5,000 - 7,499 | 96 | 182 | 1,058 | 1,025 | 2,208 | 1,320 |
| 7,500 - 9,999 | 0 | 32 | 842 | 822 | 1,984 | 1,320 |
| 10,000 - 14,999 | 0 | 28 | 705 | 702 | 1,743 | 1,279 |
| 15,000 - 24,999 | 0 | 11 | 239 | 274 | 776 | 175 |
| 25,000 and over | 0 | 0 | 0 | 0 | 0 | 0 |

Source: New Jersey Commission on Financing Postsecondary Education. "Financing in an Era of Uncertainty" (Draft), Appendix II, December 1976.

Table C

The Distribution of State Student Aid Benefits by Program and Sector

| Family Income/ Sector | State Scholarship | Incentive Programs | County College Graduate | Education Opportunity Fund | Tuition Assistance Grant | Totals |
|---|---|---|---|---|---|---|
| | | | | | | $ 4,701,342 |
| $0-2,999 | | | | | | |
| Community Colleges | $ 6,080 | $ --- | $ --- | $ 1,531,448 | $ --- | 1,537,528 |
| State Colleges | 44,500 | 3,325 | 3,000 | 1,216,904 | --- | 1,267,729 |
| Rutgers | 37,080 | 5,100 | 1,500 | 651,379 | --- | 695,059 |
| Independents | 21,500 | 18,800 | --- | 526,198 | 634,528 | 1,201,026 |
| | | | | | | 3,946,351 |
| $3,000 - 4,999 | | | | | | |
| Community Colleges | 12,495 | --- | --- | 1,183,391 | --- | 1,195,886 |
| State Colleges | 77,000 | 5,600 | 3,500 | 987,796 | --- | 1,073,896 |
| Rutgers | 71,195 | 9,180 | 1,500 | 593,380 | --- | 675,255 |
| Independents | 59,700 | 55,200 | 500 | 473,064 | 412,850 | 1,001,314 |
| | | | | | | 3,860,235 |
| $5,000 - 7,499 | | | | | | |
| Community Colleges | 37,060 | --- | --- | 721,759 | --- | 758,819 |
| State Colleges | 170,000 | 12,215 | 7,500 | 923,946 | --- | 1,113,661 |
| Rutgers | 161,160 | 19,635 | 3,500 | 606,764 | --- | 791,059 |
| Independents | 114,600 | 109,300 | 3,500 | 401,076 | 568,220 | 1,196,696 |
| | | | | | | 2,671,615 |
| $7,500 - 9,999 | | | | | | |
| Community Colleges | 37,155 | --- | --- | 219,825 | --- | 256,980 |
| State Colleges | 211,500 | 15,505 | 12,000 | 563,382 | --- | 802,387 |
| Rutgers | 180,555 | 23,035 | 3,500 | 356,920 | --- | 564,010 |
| Independents | 128,400 | 122,500 | 3,000 | 294,808 | 499,530 | 1,048,238 |

Table C (continued)

| Family Income/ Sector | State Scholarship | Incentive Programs | County College Graduate | Education Opportunity Fund | Tuition Assistance Grant | Totals |
|---|---|---|---|---|---|---|
| $10,000 - 14,999 | | | | | | $ 3,141,784 |
| Community Colleges | $ 117,085 | $ --- | $ --- | $ 7,328 | $ --- | 124,413 |
| State Colleges | 711,000 | 51,135 | 26,000 | 75,118 | --- | 863,253 |
| Rutgers | 681,785 | 75,820 | 6,500 | 11,154 | --- | 775,259 |
| Independents | 433,000 | 400,085 | 10,500 | 10,284 | 524,990 | 1,378,859 |
| $15,000 - 24,999 | | | | | | 2,265,525 |
| Community Colleges | 112,415 | --- | --- | --- | --- | 112,415 |
| State Colleges | 594,000 | 42,070 | 17,500 | --- | --- | 653,570 |
| Rutgers | 594,215 | 73,525 | 21,500 | --- | --- | 689,240 |
| Independents | 350,300 | 315,700 | 3,500 | --- | 140,800 | 810,300 |
| $25,000 and Over | | | | | | 24,115 |
| Community Colleges | --- | --- | --- | --- | --- | --- |
| State Colleges | 3,500 | 250 | --- | --- | --- | 3,750 |
| Rutgers | 5,000 | 765 | --- | --- | --- | 5,765 |
| Independents | 7,000 | 5,600 | --- | --- | 2,000 | 14,600 |
| Sector Total | | | | | | |
| Community Colleges | 322,290 | --- | --- | 3,663,751 | --- | 3,986,041 |
| State Colleges | 1,811,500 | 130,100 | 69,500 | 3,767,146 | --- | 5,778,246 |
| Rutgers | 1,730,990 | 207,060 | 38,000 | 2,219,597 | --- | 4,195,647 |
| Independents | 1,114,500 | 1,027,185 | 21,000 | 1,705,430 | 2,782,918 | 6,651,033 |
| Grand Total | $4,979,280 | $1,364,345 | $128,500 | $11,355,924 | $2,782,918 | $20,610,967 |

Source: NJ Commission on Financing Postsecondary Education. "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976." June 1976, p. 43-44.

Table D

Undergraduate In-State Enrollments by Sector and Income Group
(in FTE's)

| | County Colleges | State Colleges | NJIT | Rutgers | Independents | Proprietaries |
|---|---|---|---|---|---|---|
| $0 - 2,999 | 5,040 | 2,572 | 43 | 958 | 1,361 | 1,629 |
| 3,000 - 4,999 | 2,463 | 2,236 | 118 | 851 | 1,303 | 796 |
| 5,000 - 7,499 | 4,468 | 4,305 | 207 | 1,623 | 1,825 | 1,444 |
| 7,500 - 9,999 | 6,186 | 5,982 | 295 | 2,341 | 2,201 | 2,000 |
| 10,000 - 14,999 | 15,865 | 16,156 | 1,030 | 7,024 | 6,661 | 5,129 |
| 15,000 - 24,999 | 17,584 | 18,951 | 1,318 | 10,057 | 9,963 | 5,685 |
| 25,000 and over | 5,670 | 5,702 | 272 | 3,778 | 5,561 | 1,833 |
| Total | 57,276 | 55,904 | 3,283 | 26,632 | 28,875 | 18,516 |

Source: Information based on Data Briefs and Student Resource Survey (SRS) data.

Table E

New Jersey Tax Burden

| Family Income | Effective Rate | % of Total Taxes Paid |
|---|---|---|
| $0 - 2,999 | 4.9% | 1.1% |
| 3,000 - 4,999 | 5.6 | 3.0 |
| 5,000 - 7,499 | 5.1 | 11.3 |
| 7,500 - 9,999 | 4.9 | 17.2 |
| 10,000 - 14,999 | 4.8 | 32.1 |
| 15,000 - 24,999 | 4.5 | 26.8 |
| 25,000 and over | 2.6 | 8.4 |
| TOTAL | | 99.9% |

Source: NJ Commission on Financing Postsecondary Education. "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976." June 1976, p. 17.

Appendix B

## Effective Cost of College in New Jersey

Comparisons of individual students highlighted in a prior section of this paper focused exclusively on the impact of state aid on the price paid by the consumer for instructional services. Previous discussions however cited tuition and fees as only one part of a student budget, with student living expenses (maintenance costs) while enrolled in postsecondary education, comprising the remainder of student expenses. Sources of financial resources to postsecondary education are similarly not limited to state expenditures and student tuition and fee payments. Federal and local governments, as well as individual institutions, all make significant monetary contributions to postsecondary education in New Jersey.

Many independent institutions disburse institutionally funded "scholarships" to their students. Undergraduate institutional scholarships amounted to $8,625,518 in 1974-1975.[20] Unfortunately this data is not available in a usable form to fit the analytical framework of this report. It is estimated that the independent sector would have to come up with an additional $12 million of institutionally funded "scholarships" to lower its effective tuition to that of Rutgers.

Local contributions to higher education are implicitly included in this analysis. New Jersey counties provide community colleges with institutional subsidies to supplement state aid and student tuition payments as primary institutional revenue sources. The Commission incorporated changes in state and county subsidy levels to estimate community college full tuitions assuming stable expenditure budgets.

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20 Annual Fact Summary published by the Association of Independent Colleges and Universities in New Jersey.

Federal programs which provide support to postsecondary education are numerous and diverse. This analysis only considers major student financial aid and educational benefit programs. Federal educational benefits refer to entitlement programs which disburse funds to students based on non-educational, non-financial criteria, i.e. Veteran's and Social Security Benefits. Major student aid programs include the Basic Education Opportunity Grant (BEOG), Supplemental Education Opportunity Grant (SEOG), and College Work-Study Program (CWS).

Federal student aid and education benefit program funds are applied primarily against student maintenance expenses in this analysis. Although these federal funds have never been formally earmarked to subsidize maintenance costs, this approach has been recommended by at least one major independent study in addition to being implicitly assumed by many state policy makers.[21] New Jersey's current student financial aid programs reflect this assumption by allocating almost all of their resources in support of tuition and fee charges. Student maintenance costs remain to be offset by non-state sources. For analytical purposes federal student aid and education benefit programs comprise the non-state sources referred to above. The difference between student living expenses and the average amount of non-state aid is termed the average effective cost of maintenance. The sum of the effective prices of tuition and maintenance equals the effective cost of college attendance.

The effective cost of college attendance can be regarded as a second measure of student financial access. This measure of financial access is

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21 Federal Student Assistance: A Review of Title IV of the Higher Education Act, Consortium of Financing Higher Education, April 1975.

a useful index because it presents a complete picture of the costs associated with college attendance and the financial resources available to meet these expenses.

The added informational requirements necessary to conduct this type of analysis however create a number of formidable data collection problems. Aggregating education benefits and distributing federal student aid programs caused the staff much difficulty. Data concerning many Federal postsecondary education aid programs are simply not collected on a regular basis in New Jersey. Repeated efforts to obtain the amount of Veteran's and Social Security Benefits distributed to New Jersey students from state and federal agencies were all unsuccessful. The distribution of current federal financial aid was therefore achieved by consulting the Student Resource Survey in addition to employing a number of complex derivation techniques.[22]

The effective cost of college attendance is compared under both financing systems in Tables F, G, H, I, J and K for each institutional sector separately. The proprietary sector is not included in these tables because of a lack of data, while the independent sector has been subdivided into high and low endowment institutions.[23] Family income groupings have also been changed to better fit with federal display formats. Finally, the federal funds have been classified into two categories--entitlement and campus-based programs.

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[22] J. Davis, "A Special Analysis: Family Circumstances and Patterns of Financing A College Education," December 1975.

[23] Drew, Stevens and Princeton comprise the highly endowed independent institutions, while the remainder of New Jersey's independent colleges and universities are considered low endowment institutions.

Federal entitlement programs include the Veteran's and Social Security Benefits as well as the Basic Grant program for the purposes of this analysis. Federal education benefits were distributed to New Jersey higher education students using student data reported in the Student Resource Survey. Although this information is clearly related to the current system, the staff assumed that the distribution of veteran and social security benefits would remain relatively unchanged by the Commission plan. The disbursement of these entitlements is not contingent on specific educational or financial criteria and therefore not influenced by changes in state-level financing strategies.

The Basic Grant program is also included in the entitlement category. BEOG has been considered an entitlement program by many on the grounds that all families whose ability to pay is below a certain level are eligible to participate in the program. The maximum BEOG is one-half the total cost of education or $1,400, whichever is less.[24] Current Basic Grant awards were allocated by incorporating family ability to pay measures with average family incomes and student costs. When the resulting award distribution was compared with the proposed student costs, it was concluded the allocation of BEOG awards would not shift appreciatively under the Commission's plan. In fact, the average award was changed for only one student group, those from families earning $6,000 - 8,999 attending county colleges. The Basic Grant for this group is reduced under the proposed system since its current average award exceeds one-half the revised cost of college attendance.

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[24] Recently passed legislation calls for a maximum ceiling of $1,800 in academic year 1978-79.

The campus-based aid programs considered herein include the Supplemental Education Opportunity Grant (SEOG) and College Work-Study Programs. Campus-based programs refer to student aid funds which are allocated by the Federal government directly to the institutions for final disbursement to students. The Commission staff therefore solicited the opinions of representatives from all the institutional sectors to describe their allocation guidelines for the distribution of these funds. From these guidelines the staff derived average awards for each program by combining the total New Jersey appropriation by sector with average awards by sector and income group reported in the Student Resource Survey.[25] Estimating the distribution of such funds under the proposed plan meant taking the testimony given by these financial aid representatives and forecasting their reactions as well as the Federal government response to state financing changes. It was concluded at this meeting that no aggregate change in the total amount of campus-based aid funds allocated to New Jersey institutions of postsecondary education could be expected as a result of the Commission's proposal. Thus total SEOG and CWS appropriations to New Jersey was shifted between income groups in a way which would be expected given a redistribution of need due to the impact of the proposed system.

One general pattern emerged from this exercise--more campus-based aid monies should be available to students who are currently ineligible due to lack of funds. The majority of SEOG and CWS awards are currently made to students from the lowest income groups. The impact of the Commission plan would be to free up a proportion of these grants for students with somewhat higher family incomes. This trend is particularly evident in the community college and low endowment independent sectors.

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[25] The New Jersey Student Resource Survey was conducted jointly by the Commission and the College Entrance Examination Board during the spring term, 1975.

Tables L and M illustrate the distribution of federal campus-based aid funds by income group under the current and proposed systems respectively. The percentage figures listed in parentheses in the final total column in these tables indicate the aggregate changes projected by the Commission. Whereas, over 50% of the SEOG and CWS funds are currently allocated to students from families earning below $6,000, only approximately 15% of the same total would be necessary under the Commission proposal. As stated beforehand, this result would free up an additional 35% of New Jersey's campus-based federal allocation for distribution to students with higher family incomes.

The "bottom line" of all these calculations is of course the effective cost of college attendance to the student and his or her family. These amounts are denoted as the effective tuition/fee and maintenance figures listed on the last row of Tables F through I. The effective cost of college attendance can be considered an "out-of-pocket" cost to the student and family although loans are available in many cases to defer payment into the future. In general, the Commission believes that in most cases this effective cost of attendance is reduced for students and families with incomes below $15,000 depending on the institutional sector.

These figures are cited with extreme caution because of the large informational requirements and data problems discussed earlier in this section. The presentation of the effective costs of college attendance are shown primarily to air the views of the Commission staff on what such an analytical framework should look like as opposed to the definitive answer of what the costs are or should be.

Table F

The Effective Cost of Attending a Community College

| | Income Group | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $0 - 5,999 | | $6,000 - 8,999 | | $9,000 - 11,999 | | $12,000 - 14,999 | | $15,000 - 17,999 | | $18,000 & over | |
| | C | P | C | P | C | P | C | P | C | P | C | P |
| ll Tuition and Fees | 456 | 241 | 456 | 241 | 456 | 241 | 456 | 241 | 456 | 241 | 456 | 241 |
| erage State Student Aid | 337 | 241 | 102 | 0 | 18 | 0 | 9 | 0 | 6 | 0 | 4 | 0 |
| fective Tuition and Fees | 119 | 0 | 354 | 241 | 438 | 241 | 447 | 241 | 450 | 241 | 452 | 241 |
| intenance | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 |
| deral Entitlements | 1,459 | 1,459 | 1,581 | 1,472 | 1,116 | 1,116 | 923 | 923 | 626 | 626 | 572 | 572 |
| mpus-Based Aid | 160 | 41 | 231 | 28 | 77 | 155 | 0 | 101 | 0 | 83 | 0 | 0 |
| erage Effective Maintenance | -119 | 0 | -311 | 0 | 307 | 229 | 577 | 476 | 874 | 791 | 928 | 928 |
| ffective Tuition/Fees and Maintenance | 0 | 0 | 43 | 241 | 745 | 470 | 1,024 | 717 | 1,324 | 1,032 | 1,380 | 1,169 |

= Current system
= Proposed or Commission system

Table G

The Effective Cost of Attending a State College

| | Income Group | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | $0 - 5,999 | | $6,000 - 8,999 | | $9,000 - 11,999 | | $12,000 - 14,999 | | $15,000 - 17,999 | | $18,000 & over | |
| | C | P | C | P | C | P | C | P | C | P | C | P |
| Full Tuition and Fees | 724 | 535 | 724 | 535 | 724 | 535 | 724 | 535 | 724 | 535 | 724 | 535 |
| Average State Student Aid | 361 | 461 | 181 | 33 | 66 | 30 | 49 | 26 | 33 | 20 | 22 | 6 |
| Effective Tuition and Fees | 363 | 74 | 543 | 502 | 658 | 505 | 675 | 509 | 691 | 515 | 702 | 529 |
| Maintenance | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 | 1,880 |
| Federal Entitlements | 1,805 | 1,805 | 1,532 | 1,532 | 982 | 982 | 733 | 733 | 481 | 481 | 453 | 453 |
| Campus-Based Aid | 442 | 75 | 67 | 348 | 110 | 164 | 2 | 0 | 0 | 0 | 0 | 0 |
| Average Effective Maintenance | -367 | 0 | 281 | 0 | 788 | 734 | 1,145 | 1,147 | 1,399 | 1,399 | 1,427 | 1,427 |
| Effective Tuition/Fees and Maintenance | -4 | 74 | 824 | 502 | 1,446 | 1,239 | 1,820 | 1,656 | 2,090 | 1,914 | 2,129 | 1,956 |

C = Current system
P = Proposed or Commission system

Table H

The Effective Cost of Attending the New Jersey Institute of Technology

| | Income Group | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $0 - 5,999 | | $6,000 - 8,999 | | $9,000 - 11,999 | | $12,000 - 14,999 | | $15,000 - 17,999 | | $18,000 & over | |
| | C | P | C | P | C | P | C | P | C | P | C | P |
| Full Tuition and Fees | 702 | 1,454 | 702 | 1,454 | 702 | 1,454 | 702 | 1,454 | 702 | 1,454 | 702 | 1,454 |
| Average State Student Aid | 299 | 1,350 | 170 | 880 | 73 | 785 | 50 | 652 | 30 | 484 | 23 | 146 |
| Effective Tuition and Fees | 403 | 104 | 532 | 574 | 629 | 669 | 652 | 802 | 672 | 970 | 679 | 1,308 |
| Maintenance | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 | 2,290 |
| Federal Entitlements | 1,805 | 1,805 | 1,532 | 1,532 | 982 | 982 | 733 | 733 | 481 | 481 | 453 | 453 |
| Campus-Based Aid | 596 | 485 | 67 | 150 | 110 | 110 | 79 | 79 | 0 | 0 | 0 | 0 |
| Average Effective Maintenance | -111 | 0 | 691 | 608 | 1,198 | 1,198 | 1,478 | 1,478 | 1,809 | 1,809 | 1,837 | 1,837 |
| Effective Tuition/Fees and Maintenance | 292 | 104 | 1,223 | 1,182 | 1,827 | 1,867 | 2,130 | 2,280 | 2,481 | 2,779 | 2,516 | 3.145 |

C = Current system
P = Proposed or Commission system

Table I

The Effective Cost of Attending Rutgers

| | Income Group | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $0 - 5,999 | | $6,000 - 8,999 | | $9,000 - 11,999 | | $12,000 - 14,999 | | $15,000 - 17,999 | | $18,000 & over | |
| | C | P | C | P | C | P | C | P | C | P | C | P |
| Full Tuition and Fees | 730 | 1,408 | 730 | 1,408 | 730 | 1,408 | 730 | 1,408 | 730 | 1,408 | 730 | 1,408 |
| Average State Student Aid | 638 | 1,334 | 284 | 855 | 116 | 773 | 71 | 655 | 48 | 503 | 30 | 123 |
| Effective Tuition and Fees | 92 | 74 | 446 | 553 | 614 | 635 | 659 | 753 | 682 | 905 | 700 | 1,285 |
| Maintenance | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 | 2,240 |
| Federal Entitlements | 1,629 | 1,629 | 1,303 | 1,303 | 880 | 880 | 695 | 695 | 413 | 413 | 409 | 409 |
| Campus-Based Aid | 689 | 611 | 254 | 329 | 78 | 78 | 71 | 71 | 56 | 56 | 59 | 59 |
| Average Effective Maintenance | -78 | 0 | 683 | 608 | 1,282 | 1,282 | 1,474 | 1,474 | 1,771 | 1,771 | 468 | 468 |
| Effective Tuition/Fees and Maintenance | 14 | 74 | 1,129 | 1,161 | 1,896 | 1,917 | 2,133 | 2,227 | 2,453 | 2,676 | 1,168 | 1,753 |

C = Current system
P = Proposed or Commission system

Table J

The Effective Cost of Attending a High Endowment Independent Institution

| | Income Group | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $0 - 5,999 | | $6,000 - 8,999 | | $9,000 - 11,999 | | $12,000 - 14,999 | | $15,000 - 17,999 | | $18,000 & over | |
| | C | P | C | P | C | P | C | P | C | P | C | P |
| Full Tuition and Fees | 3,601 | 3,687 | 3,601 | 3,687 | 3,601 | 3,687 | 3,601 | 3,687 | 3,601 | 3,687 | 3,601 | 3,687 |
| Average State Student Aid | 758 | 2,765 | 498 | 2,765 | 233 | 2,765 | 174 | 2,426 | 64 | 1,920 | 30 | 342 |
| Effective Tuition and Fees | 2,843 | 922 | 3,103 | 922 | 3,368 | 922 | 3,427 | 1,261 | 3,537 | 1,767 | 3,571 | 3,345 |
| Maintenance | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 |
| Federal Entitlements | 1,954 | 1,954 | 1,344 | 1,344 | 922 | 922 | 692 | 692 | 481 | 481 | 438 | 438 |
| Campus-Based Aid | 1,419 | 1,257 | 403 | 482 | 177 | 177 | 141 | 141 | 131 | 131 | 90 | 90 |
| Average Effective Maintenance | -1,084 | -922 | 542 | 463 | 1,190 | 1,190 | 1,456 | 1,456 | 1,677 | 1,677 | 1,761 | 1,761 |
| Effective Tuition/Fees and Maintenance | 1,759 | 0 | 3,645 | 1,385 | 4,558 | 2,112 | 3,883 | 2,717 | 5,214 | 3,444 | 5,332 | 5,106 |

C = Current system
P = Proposed or Commission system

Table K

The Effective Cost of Attending a Low Endowment Independent Institution

| | Income Group | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $0 - 5,999 | | $6,000 - 8,999 | | $9,000 - 11,999 | | $12,000 - 14,999 | | $15,000 - 17,999 | | $18,000 & over | |
| | C | P | C | P | C | P | C | P | C | P | C | P |
| Full Tuition and Fees | 2,402 | 2,573 | 2,402 | 2,573 | 2,402 | 2,573 | 2,402 | 2,573 | 2,402 | 2,573 | 2,402 | 2,573 |
| Average State Student Aid | 781 | 2,497 | 498 | 2,001 | 233 | 1,836 | 174 | 1,590 | 64 | 1,265 | 37 | 321 |
| Effective Tuition and Fees | 1,621 | 76 | 1,904 | 572 | 2,169 | 737 | 2,228 | 983 | 2,338 | 1,308 | 2,365 | 2,252 |
| Maintenance | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 | 1,680 |
| Federal Entitlements | 1,954 | 1,954 | 1,345 | 1,345 | 922 | 922 | 692 | 692 | 481 | 481 | 438 | 438 |
| Campus-Based Aid | 717 | 0 | 242 | 356 | 177 | 758 | 161 | 318 | 101 | 0 | 0 | 0 |
| Average Effective Maintenance | -291 | -274 | 94 | 0 | 581 | 0 | 827 | 670 | 1,098 | 1,199 | 1,242 | 1,242 |
| Effective Tuition/Fees and Maintenance | 1,330 | -178 | 1,998 | 572 | 2,750 | 737 | 3,055 | 1,653 | 3,436 | 2,507 | 3,607 | 3,494 |

C = Current system
P = Proposed or Commission system

Table L

The Distribution of Federal Campus-Based Aid (SEOG and CWS) Funds Under the Current System in FY 76

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | High Endowment Independents | Low Endowment Independents | Total | |
|---|---|---|---|---|---|---|---|---|
| $0 - 5,999 | 1,402,080 | 2,644,044 | 131,120 | 1,558,518 | 107,844 | 2,349,609 | 8,193,215 | (50.5%) |
| 6,000 - 8,999 | 1,495,032 | 419,487 | 19,765 | 594,614 | 62,465 | 530,706 | 3,122,069 | (19.3%) |
| 9,000 - 11,999 | 674,751 | 934,670 | 48,730 | 273,936 | 40,887 | 509,760 | 2,482,734 | (15.3%) |
| 12,000 - 14,999 | --- | 21,020 | 57,986 | 332,422 | 38,634 | 697,774 | 1,147,836 | (7.1%) |
| 15,000 - 17,999 | --- | --- | --- | 219,016 | 26,986 | 293,607 | 539,609 | (3.3%) |
| 18,000 and over | --- | --- | --- | 585,457 | 143,910 | --- | 729,367 | (4.5%) |
| Total | 3,571,863 | 4,019,221 | 257,601 | 3,563,963 | 420,726 | 4,381,456 | 16,214,830 | (100.0%) |

Table M

The Distribution of Federal Campus-Based Aid (SEOG and CWS) Funds Under the Commission Proposal in FY 76

| Income Group | County Colleges | State Colleges | NJIT | Rutgers | High Endowment Independents | Low Endowment Independents | Total | |
|---|---|---|---|---|---|---|---|---|
| $0 - 5,999 | 359,283 | 448,650 | 106,700 | 1,382,082 | 95,532 | --- | 2,392,247 | (14.8%) |
| 6,000 - 8,999 | 181,216 | 2,178,828 | 44,250 | 770,189 | 74,710 | 780,708 | 4,029,901 | (25.0%) |
| 9,000 - 11,999 | 1,358,265 | 1,393,508 | 48,730 | 273,936 | 40,887 | 2,183,040 | 5,298,366 | (32.8%) |
| 12,000 - 14,999 | 1,012,323 | --- | 57,986 | 332,422 | 38,634 | 1,378,212 | 2,819,577 | (17.5%) |
| 15,000 - 17,999 | 632,294 | --- | --- | 219,016 | 26,986 | --- | 878,296 | (5.4%) |
| 18,000 and over | --- | --- | --- | 585,457 | 143,910 | --- | 729,367 | (4.5%) |
| Total | 3,543,381 | 4,020,986 | 257,666 | 3,563,102 | 420,659 | 4,341,960 | 16,147,754 | (100.0%) |